Infrastructure and Services

Module Information

2022.01, Approved

Summary Information

Module Code	6114COMP
Formal Module Title	Infrastructure and Services
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
Lecture	22
Practical	22
Tutorial	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

Aims	To explore the network environment in modern large organisations and appreciate the complexity of the deployed infrastructure.To understand the complex interactions between network services and the holistic approach that must be adopted to strike a balance between utility and security.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Analyse the composition of large organisational networks and the challenges they are faced with
MLO2	2	Demonstrate advanced knowledge of network operations and management and the key services that are required
MLO3	3	Assess existing and emerging network services and explain their potential impact on the underlying infrastructure
MLO4	4	Evaluate the range of threats that face network services and understand the potential approaches to mitigate, manage, or overcome them

Module Content

Outline Syllabus	Overview of network infrastructure: Deployment and composition of large networks. Addressing, naming, and routing protocols and schemes. Network management approaches and tools.Networked services: Fundamental networked services, Networked persistent storage, Remote service provisioning and management, Support for complex userbase
Module Overview	
Additional Information	Modern large networks are vastly complex infrastructures that require constant management in order to support the complex and ever-evolving range of services and applications that are being deployed. This module will look at the effective management and operation of networks and the tools and techniques that can be employed to support this. It will also closely examine the range of services that are being operated in these network environments and the opportunities and challenges that they introduce.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Centralised Exam	Management of Large Networks	50	0	MLO1, MLO2
Centralised Exam	Deployment of Network Services	50	0	MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Alessandro Raschella	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings